

**ORIGINAL
FILE
RECEIVED**

JUN - 8 1992

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of

**Redevelopment of Spectrum to
Encourage Innovation in the Use
of New Telecommunications
Technologies**

ET Docket No. 92-9

**COMMENTS OF
PERSONAL COMMUNICATIONS NETWORK SERVICES OF NEW YORK, INC.**

**Andrew D. Lipman
Shelley L. Spencer
Margaret M. Charles
Swidler & Berlin, Chartered
3000 K Street, N.W., Suite 300
Washington, D.C. 20007-3851
(202) 944-4300**

Dated: June 8, 1992

No. of Copies rec'd 074
List A B C D E

SUMMARY

PCNS-NY, a LOCATE company, has pioneered the use of market-based negotiations as a means to migrate existing users of the 1850-1990 MHz band to higher frequencies or alternative media and free up spectrum for emerging technologies such as PCS. PCNS-NY has already proven, through its unmatched experimental efforts, that the Commission's proposed transition plan can provide spectrum for emerging technologies without compromising the reliability or quality of the communications systems of existing users in the 1850-1990 MHz band. PCNS-NY enthusiastically endorses the Commission's proposed three-step transition plan as an innovative approach to create an emerging technologies band and to protect the communications needs of existing operational fixed microwave users.

PCNS-NY's successful approach to negotiations with existing users in the 1850-1990 MHz band provide a model for marketplace negotiations between future spectrum licensees and existing users. (Four separate users who have been approached by PCNS-NY have submitted letters to the FCC declaring their willingness to relocate to higher frequencies under the terms and conditions offered by PCNS-NY.) Through individualized negotiations with existing users, PCNS-NY has found that the key to a successful relocation agreement is flexibility. PCNS-NY demonstrates its commitment to providing the existing user with satisfactory

replacement facilities through its commitment to:

- (1) pay the reasonable costs of relocation;
- (2) design a replacement system to meet the existing users needs;
- (3) "prove in" the existing system to prevent disruption to service; and
- (4) ensure equivalent reliability of the new network.

With these four principles in place, PCNS-NY has found that existing users, including local and state government agencies, public safety organizations and utility companies, are receptive to relocation. The experience of PCNS-NY's parent company, LOCATE, in designing, engineering and constructing state-of-the-art microwave network has provided existing users with confidence in PCNS-NY's relocation proposals that incorporate a clear expertise in the design of microwave networks.

Each element of the Commission's three part transition plan is critical to the process of market-based negotiations. Without restrictions on the licensing of new and all modified to microwave facilities applications for frequencies in the 1850-1990 MHz and the adherence to a fixed time frame at the end of which existing users will revert to secondary status (preferably three years), new licensees such as PCNS-NY would not be able to successfully negotiate relocation agreements. Both of these elements of the Commission's transition plan have been instrumental in PCNS-NY's ability to initiate relocation negotiations with existing users.

In one-on-one negotiations with PCNS-NY, existing users of the 1850-1990 MHz band have witnessed first hand the potential and significant benefits to be achieved from negotiated relocation. Through market-based negotiations existing users can receive new, upgraded communications facilities at no cost that offer equivalent or improved reliability. In addition, PCS presents a new business opportunity for many utilities, railroads and public safety organizations that can benefit from the early use of PCS and the potential lease of their rights-of-way.

There is no other viable alternative to market-based negotiations that will facilitate immediate and economically efficient introduction of PCS in the United States. An allocation of government spectrum is unrealistic. Aside from the fact that the process of allocating government spectrum is lengthy and cumbersome, use of government spectrum as an option for relocating of existing 2 GHz users would also delay introduction of emerging technologies by complicating the market-based negotiations process. In addition, the availability of government spectrum for emerging technologies such as PCS would not obviate the need for relocation of microwave users.

PCNS-NY urges the Commission to adopt its three step transition plan as proposed. The proposed alternatives to the transition plan are inferior. As proposed by the Commission, the phased-in proposal would not compensate existing users for the cost of relocation. In essence, the phased-in approach would be tantamount to the "band clearing" which the Commission has

tantamount to the "band clearing" which the Commission has attempted to avoid. Co-primary use of the 2 GHz band by new licensees and existing users is untenable since, to date, no sharing techniques have been proven to provide acceptable interference protection. PCNS-NY has been informed uniformly by existing users that they cannot tolerate interference and that, if given a choice between sharing and relocation, they would choose relocation. Allocating the band on a co-primary basis will simply defer the battle for control of the band because ultimately either the new or the existing services would have to be relocated to resolve interference problems. In addition, without a fixed time frame for existing users to go to secondary status, existing users will have an unfair advantage in negotiating relocation agreements and be able to leverage the threat of continued, indefinite occupancy of the band.

As an added measure of flexibility, PCNS-NY alternatively proposes that the Commission initially allocate spectrum for emerging technologies to the top 30 markets as defined by demand for services and frequency congestion. This would create spectrum for new services where there is the greatest demand, initiate the relocation process in the areas of greatest congestion and provide an extended time frame for rural users and users in less congested markets to relocate out of the band.

Expedient action by the Commission to allocate spectrum to PCS is essential to the continued competitiveness of United States equipment providers and telecommunications service

provider. The time to act is now. Europe and Japan have already allocated spectrum to new technologies and put the United States leadership position in the telecommunications industry in jeopardy. Accordingly, PCNS-NY urges the Commission promptly conclude this proceeding to establish the emerging technologies band and to immediately to proceed with a Notice of Proposed Rulemaking on PCS.

TABLE OF CONTENTS

SUMMARY	
I. INTRODUCTION	3
A. PCNS-NY	3
B. The Commission's Innovative Proposal Will Protect Existing Users and Provide Spectrum For New Services	5
II. THE COMMISSION'S DECISION TO ENCOURAGE RELOCATION THROUGH Marketplace NEGOTIATIONS WITH EXISTING USERS OF SPECTRUM AND FUTURE LICENSEES IS IN THE PUBLIC INTEREST	8
A. PCNS-NY's Negotiations With Fixed Microwave Users in the 1850 - 1990 MHz Band Demonstrate That the Marketplace Approach Will Work to Relocate Existing Users	9
B. Existing Users Are Receptive to Relocation Through Market-Based Negotiations	15
C. The Commission Should Not Inhibit Flexibility in Negotiations by Imposing Restrictions	19
III. RELOCATION OF EXISTING 2 GHz USERS TO HIGHER FREQUENCIES IS FEASIBLE AND WILL NOT DEGRADE COMMUNICATIONS CAPABILITIES	21
IV. THERE IS NO OTHER VIABLE ALTERNATIVE TO MARKET-BASED NEGOTIATIONS THAT WILL FACILITATE IMMEDIATE AND EFFICIENT INTRODUCTION OF PCS	24
V. MIGRATION THROUGH MARKET-BASED NEGOTIATIONS WILL BE FOSTERED BY THE TRANSITION PLAN PROPOSED BY COMMISSION AND PROVIDE FOR THE INTRODUCTION OF NEW TECHNOLOGIES IN DIFFERENT MARKETS AS APPROPRIATE	29
A. PCNS-NY Supports Grant of Secondary Status to New Applicants for Microwave Licenses in 2 GHz	29
B. Use of the 2 GHz Band on a Co-primary Basis is Not Feasible	30
VI. MARKET-BASED NEGOTIATIONS IN CONJUNCTION WITH THE PROPOSED TRANSITION PLAN IS THE BEST WAY TO MEET THE NEEDS OF EXISTING USERS AND USHER IN NEW TECHNOLOGIES	33

A.	A Phased Spectrum Implementation Approach is Contrary to the Public Interest and Inferior to the Three Step Transition Plan Proposal	33
B.	Continuous Co-Primary Use of the 2 GHz Band is Untenable If New Technologies Are to be Efficiently Implemented	35
C.	The Commission Could Begin the Relocation Process By Allocating Spectrum in the Top 30 Markets . . .	36
VII.	PCS MEETS THE COMMISSION'S CRITERIA FOR DETERMINING ELIGIBILITY FOR ALLOCATIONS FROM THE EMERGING TECHNOLOGIES BAND	37
VIII.	THE COMMISSION SHOULD PROCEED QUICKLY WITH PCS THROUGH MIGRATION	38
IX.	CONCLUSION	40

Before the
Federal Communications Commission
Washington, D.C. 20554

RECEIVED

JUN - 8 1992

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of

Redevelopment of Spectrum to
Encourage Innovation in the Use
of New Telecommunications
Technologies

ET Docket No. 92-9

COMMENTS OF
PERSONAL COMMUNICATIONS NETWORK SERVICES OF NEW YORK, INC.

Personal Communications Network Services of New York, Inc., a LOCATE Company ("PCNS-NY"), by its undersigned counsel, hereby submits these comments in support of the Commission's Notice of Proposed Rulemaking ("Notice") to allocate spectrum to an emerging technologies band that will provide spectrum for personal communications services ("PCS").^{1/}

PCNS-NY endorses the Commission's proposed three step transition plan to create an emerging technologies band that will expedite the introduction of PCS to the American people and enable the United States to retain its position as a competitive leader in telecommunications services. As reflected by the Notice, the Commission has properly balanced the spectrum needs

^{1/} In the Matter of Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, Notice of Proposed Rulemaking, ET Docket No. 92-9, (Released February 7, 1992).

of existing users of the 2 GHz band with the need for spectrum to introduce emerging technologies and services. Specifically, PCNS-NY applauds the Commission's proposed innovative use of marketplace negotiations to expedite the relocation of existing users of the 2 GHz band.

PCNS-NY has proven the viability of the Commission's market-based approach to reallocation through actual negotiations with existing users in the 1850-1990 MHz band. As part of its extensive experimental activities, PCNS-NY has initiated negotiations with all of the existing users in the 1850-1990 MHz band in the New York City metropolitan area, and, with recent authorization to test in other cities, has expanded its efforts to other cities on the West Coast. In one-on-one negotiations PCNS-NY has found that existing users are receptive to relocation.^{2/} If awarded a PCS license, PCNS-NY believes, based on the success of its negotiations to date, that it could relocate existing users in the 1850-1990 MHz band in a single market, on terms favorable and acceptable to those users within one year of receiving a license. PCNS-NY is pleased to file these comments in support of the Commission's Notice to document the utility and feasibility of using marketplace principles to migrate existing users out of the 2 GHz band.

^{2/} See Letters from Suffolk County Police Department, Long Island Lighting Co., San Diego Gas & Electric and the City of San Diego attached as Exhibits A, B, C and D.

I. INTRODUCTION

A. PCNS-NY

PCNS-NY is a small entrepreneurial company and a leader in the PCS industry of the United States. PCNS-NY was established in 1990 as a wholly-owned subsidiary of Local Area Telecommunications, Inc. ("LOCATE"). Since its formation, PCNS-NY has devoted its resources exclusively to the development of PCS and the development of successful relocation strategies that will provide spectrum for PCS and protect the communications capabilities of existing users. PCNS-NY's efforts have produced agreements, that if PCNS-NY is awarded a PCS license, will yield efficiencies in the use of spectrum in both the 1850-1990 MHz and in higher frequency bands, such as the 4, 6, 10, 11, 18 and 23 GHz bands, that have sufficient capacity to accommodate additional private microwave use.

The experience of PCNS-NY's parent company, LOCATE, has uniquely positioned PCNS-NY to understand and address the communications needs of private fixed microwave users in the 1850-1990 MHz band.^{3/} LOCATE currently operates a fully digital common carrier microwave network in the New York City metropolitan area. LOCATE also designs and constructs microwave facilities and systems for other common carrier and private

^{3/} In anticipation of an allocation of spectrum from the 1850-1990 MHz band for PCS, PCNS-NY has confined its relocation efforts to private microwave services operating in the 1850-1990 MHz band. PCNS-NY has not approached users of the remaining two bands, identified by the Commission in the Notice 2110-2150 and 2160-2200 MHz.

carrier networks. Over the past decade, LOCATE has engineered and constructed over two hundred and seventy five digital microwave systems for Fortune 500 companies including regional Bell Operating Companies. LOCATE itself has microwave facilities operating in the 2.1 to 2.2 GHz band that it intends to migrate to higher frequencies when the Commission's proposal is adopted.

PCNS-NY was the first PCS experimental licensee to propose, and actually begin negotiating, with existing users in the 1850-1990 MHz band for relocation of their facilities to higher bands or alternative media such as fiber optics.^{4/} Through its efforts, PCNS-NY has demonstrated to existing users that relocation will not require a sacrifice in communications reliability or compromise their communications needs. PCNS-NY has also demonstrated the substantial benefits that existing users can achieve through relocation. Through flexible, market-based negotiations, existing users are in a position to receive, as a direct result of the Commission's proposal, upgraded communications facilities engineered to provide equivalent

^{4/} PCNS-NY first proposed migration of existing users to higher frequencies in its March 26, 1991 Progress report. PCNS-NY has pursued this innovative proposal diligently and successfully since that time. See, e.g., PCNS-NY's Request for a Pioneer's Preference PP No. 16, Gen Docket 90-314 (filed July 30, 1991) ("Pioneer's Preference Request") at 21-24; PCNS-NY Progress Report dated March 26, 1991 at 6-7; PCNS-NY Progress Report June 28, 1991 Exhibit III; PCNS-NY Progress Report dated September 30, 1991 at 2-4, Exhibit II; PCNS-NY Progress Report dated December 31, 1991 at 2, C-4, C-5; En Banc Hearing Testimony of R. Craig Roos at 9-12 (filed November 21, 1991); Oral Presentation of R. Craig Roos at En Banc Hearing (December 5, 1991); Comments of PCNS-NY on Requests for Pioneers Preference (filed January 24, 1992).

reliability at no cost. In return, spectrum will be provided to facilitate early deployment of PCS.

PCNS-NY has contributed substantially to the evaluation of spectrum alternatives of PCS through its unmatched migration efforts, its actual work with existing 2 GHz users and its innovative proposal to revitalize and reinvigorate the Digital Termination Service ("DTS") for use with PCS.^{5/} In recognition of its pioneering contributions to the development of PCS and the substantial risk it has assumed as a small, entrepreneurial company to develop PCS, PCNS-NY requested a pioneer's preference to provide PCS in the New York City metropolitan area.^{6/}

B. The Commission's Innovative Proposal Will Protect Existing Users and Provide Spectrum For New Services

The Commission's Notice proposes a regulatory framework that will usher in the next generation of wireless communications and provide reasonably-priced high quality communications services to a broad cross section of the American people. Other countries have already begun to introduce PCS services and are positioned to surpass the United States in technological innovation and advanced telecommunications services. The Commission has assumed a leadership position on this issue that should not be compromised in an unnecessary spectrum battle.

^{5/} See Pioneer's Preference Request at 24-28.

^{6/} See Footnote 4, supra.

The FCC has not proposed the reallocation of the spectrum identified in the Notice (the 1.85-1.99, 2.11-2.15 and 2.16-2.20 GHz) lightly. The Commission recognizes that creation of the emerging technologies band will "unavoidably necessitate the relocation of a significant number of existing users."^{7/} The Commission identified specific frequencies for reallocation to an emerging technologies band only after completion of a technical study of the frequency bands and other spectrum alternatives. Based on the application of five reasonable factors identified in the Commission's Notice, the Commission identified the 1.85-1.99, 2.11-2.15 and 2.16-2.20 GHz bands.^{8/} Furthermore, the Commission has proposed a specific framework that incorporates safeguards and procedures to minimize the impact on existing users of the spectrum to be allocated to the emerging technologies band.

The Commission has proposed a regulatory framework that will permit allocation of a wide band of suitable frequencies to emerging technologies with minimal impact on existing users through a three phase transition plan.^{9/} Each phase of the transition plan is critical to the timely reallocation of spectrum for new services that are already waiting in the wings. In the first phase, which became effective upon adoption of the Notice, the Commission decided to grant new applications for

^{7/} Notice at ¶ 9.

^{8/} Notice at ¶ 19.

^{9/} Notice at ¶ 9, 22.

fixed microwave facilities filed after adoption of the Notice on a secondary basis only subject to the outcome of this proceeding.^{10/} This sensible decision encourages existing licensees to consider frequencies other than those proposed for reallocation in planning network expansions and new construction. The Commission's decision also permits existing users to make informed equipment purchase decisions and inhibits the speculative filing of license applications for the 2 GHz band.

In the second phase of the transition plan, the Commission proposes to allow currently licensed 2 GHz users to continue to occupy the band on a co-primary basis with any new service for a fixed period of time.^{11/} This phase of the proposal is critical to the third phase of the transition plan -- the use of market-based negotiations.

The final component of the transition plan encourages the negotiation of financial arrangements between new and existing licensees to facilitate relocation of existing users and relies

^{10/} See Notice at ¶ 23. The Commission recently modified this policy to exempt from secondary status applications for certain modifications of facilities licensed prior to January 16, 1992. The Commission also chose to permit continued licensing of additional links that may be required to complete a communications network or new facilities and/or frequencies that will be operationally connected to a system licensed prior to January 16, 1992. See Public Notice (rel. May 14, 1992). PCNS-NY encourages the Commission to narrowly construe this exception and to strictly scrutinize any applications filed under the rubric of the Commission's modified policy to prevent the exception from overriding the rule.

^{11/} Notice at ¶ 24. The Commission has proposed a time frame "such as 10-15 years". Such an extended time frame is unnecessary. See Section V B infra.

on the effectiveness of market forces.^{12/} In contrast to past "band clearing" reallocations, this novel component of the transition plan will permit existing users to benefit substantially from relocation to higher frequencies or alternative media.

PCNS-NY's experience in market-based negotiations with existing users of the 1850-1990 MHz band illustrates that the Commission's proposed three step transition plan will fulfill the two, often-competing, goals of providing spectrum for the introduction of new technologies and minimizing disruption of existing services that must be relocated. In particular, PCNS-NY lauds the Commission's creativity in proposing to use market-based principles to expedite the necessary relocation of existing users. As recognized by the Commission, the marketplace, rather than a federal agency, is best suited to mediate the interests of existing users and emerging technology licensees. Accordingly, PCNS-NY supports the Commission's innovative approach to this reallocation.

II. THE COMMISSION'S DECISION TO ENCOURAGE RELOCATION THROUGH Marketplace NEGOTIATIONS WITH EXISTING USERS OF SPECTRUM AND FUTURE LICENSEES IS IN THE PUBLIC INTEREST

The transition plan proposed by the Commission is critical to the expedient introduction of new services such as PCS, to the people of the United States and to the continued competitiveness

^{12/} See Notice at ¶ 26.

of United States equipment manufacturers and telecommunications service providers. As detailed below, PCNS-NY's experience in market-based negotiations with private operational fixed licensees in the 1850-1990 MHz band suggests that the Commission's approach to market-driven flexible relocation is the best mechanism for relocating current licensees in the 1850-1990 MHz band.

A. PCNS-NY's Negotiations With Fixed Microwave Users in the 1850-1990 MHz Band Demonstrate That the Marketplace Approach Will Work to Relocate Existing Users

The Commission has requested information on how the negotiation process between existing users and new licensees would work. PCNS-NY is pleased to provide the following description of how the process actually works based on its negotiations with existing users in the New York metropolitan area and California.

The key to a successful relocation agreement is, as the Commission recognizes, flexibility.^{13/} Each negotiation turns on the specific needs and preferences of the existing user. PCNS-NY's commitment to meeting the needs of existing users and the flexibility exhibited in this approach provides a model of how the Commission's market-based approach can not only introduce new technologies but also benefit existing users.^{14/}

^{13/} Notice at ¶ 26.

^{14/} To date most of PCNS-NY's pioneering work has been performed in the New York City Metropolitan area where it received its initial experimental authorization for PCS. See Experimental
(continued...)

As the starting point for its relocation strategy in any market, PCNS-NY first identifies all of the existing OFS users in the 1850-1990 MHz band, including state and local government public safety organizations.^{14/} When PCNS-NY first began negotiating with existing users in the New York City metropolitan area there were eight OFS users operating narrowband, microwave facilities in the 1850-1990 MHz band. As a direct result of PCNS-NY's discussions with these users, two of these users agreed to retire their licenses to the FCC. The remaining licensees operate a total of 35 links in the New York City metropolitan area.

^{14/} (...continued)

Radio Station Construction Permit and License awarded to Local Area Telecommunications, Inc., File No. 1512-EX-PL-90 (effective September 24, 1990 and assigned to its wholly-owned subsidiary, PCNS-NY effective December 20, 1990). PCNS-NY recently received additional experimental authorization from the Commission for San Diego, Los Angeles and San Juan and has begun to negotiate with existing users in these areas. See Experimental Radio Station Construction Permit and License awarded to Local Area Telecommunications Inc., File No. 1813-EX-PL-91, File No. 1846-EX-PL-91 and File No. 1883-EX-PL-91 (effective March 16, 1992). PCNS-NY's experimental authorizations have been a critical element in its relocation negotiations with existing 2 GHz users.

^{15/} Although the Commission has proposed to exempt state and local governments from the mandatory transition period, PCNS-NY firmly believes that clear spectrum will be most beneficial to new services and is actually negotiating with state and local government agencies that operate public safety communications networks in the 1850-1990 MHz band. These users have been receptive to relocation under the terms and conditions proposed by LOCATE. See Letters from Suffolk County Police Department and the City of San Diego attached as Exhibits A and D.

PCNS-NY applies four essential elements to each negotiation:

- (1) A commitment as a potential PCS provider to pay the full, reasonable costs of relocation that may include the costs of design, equipment (including radio equipment, antennas, necessary power equipment, tower modifications or replacements) and installation. PCNS-NY also agrees to pay the cost of additional facilities (i.e. repeaters) if required.
- (2) A commitment to design and provide replacement facilities that meet the needs of existing users and, when feasible, incorporate equipment upgrades. A commitment to permit the existing user to specify the required replacement facilities.
- (3) A commitment to "prove in the new system." As with all replacement networks it builds, PCNS-NY constructs and tests the new system parallel to the existing system before the existing system is retired. This eliminates any down time.
- (4) A commitment to design and engineer a system that will provide equivalent reliability to the existing user.

LOCATE's expertise in the design, frequency coordination, installation and maintenance of microwave communications in a variety of operating frequencies makes it uniquely qualified to implement a migration plan.

(1) Commitment to Pay Costs of Relocation.

A fundamental tenet of market place negotiations is the emerging technology licensee's commitment to pay for the reasonable costs of relocation.^{16/} PCNS-NY's negotiations include network design, frequency coordination, equipment

^{16/} The cost of relocation and the components of relocation are unique to each user and best determined in individual negotiations rather than by Commission mandate.

upgrades and full testing and installation of the improved network facilities by the PCS licensee.

The outer price boundary for negotiated agreements between existing users and new licensees must be the reasonable costs of relocation. PCNS-NY has yet to encounter any resistance to this position during its negotiations. Indeed, the enthusiasm over the prospect of receiving a replacement system that may include system upgrade at no cost quells any demands for compensation above relocation costs. PCNS-NY believes that any compensation beyond the reasonable costs of relocation would undermine the FCC's goal of expediting migration from the band by creating an environment in which current licensees could hold out for windfall profits.^{17/}

The Commission's proposal to confer secondary status to existing users at the end of the established transition period and to grant all new licenses in the 2 GHz band on a secondary basis also deters existing licensees from requesting additional compensation beyond the reasonable costs of relocation, (i.e., "windfall profits") as an incentive to relocate. Without this sunset period, however, PCNS-NY believes that existing users could become intransigent or use the leverage of continued occupation of the band to increase the price of relocation. Specifically, elimination of the fixed time frame will create an unlevel playing field in which existing users will be able to hold out indefinitely for excessive compensation and effectively

^{17/} See Notice at ¶ 26, n.20.

block the introduction of new technologies. In negotiations, the second element of the Commission's transition plan has been essential to initiate discussions with existing users and in establishing a reasonable framework for negotiations.

(2) Design of Replacement System to Meet the Existing Users Needs

As with all microwave systems LOCATE installs, PCNS-NY presents each existing user with a comprehensive relocation proposal that includes the design, frequency coordination construction, installation and testing of new facilities. PCNS-NY approaches each existing user with the experience and expertise necessary to successfully design, engineer and install a replacement system that will fully satisfy the existing user's communications needs. In its proposals, (contingent upon PCNS-NY's receipt of a PCS license from the FCC), PCNS-NY offers to replace the existing user's 2 GHz microwave system with facilities that either operate on higher frequencies or use alternative media and that can be fully integrated into the current users network.

As an added benefit, PCNS-NY's relocation proposals often include equipment and network upgrades that significantly improve the capacity, quality and reliability of the existing communications systems.^{18/} A number of existing users currently

^{18/} For example, PCNS-NY has proposed to redesign one user's system from a star into a ring configuration that will provide diverse routing and increase reliability of the network. PCNS-NY has also offered to install new towers for additional facilities for one existing 2 GHz user's new network and to purchase state-of-the-art microwave equipment.

operating 2 GHz microwave facilities lack the financial resources to purchase new digital equipment. Local governments and public safety organizations who are exempt from the Commission's mandatory migration proposal are interested in negotiating relocation agreements that will permit them to make network improvements at a time when they face budget cuts and are striving to reduce deficits and impose limited tax increases. The opportunity to upgrade a network at no cost in times of fiscal restraint is unprecedented but possible under the Commission's proposal. In addition utilities consider the PCNS-NY migration proposal as an opportunity to make capital improvements to their communications network at no cost to the ratepayers.

(3) Commitment to "Prove In" the Existing System to Prevent Disruption In Service

PCNS-NY recognizes that existing users cannot afford any down time in their communications network. Accordingly, as with any microwave network LOCATE designs in its competitive access business, PCNS-NY agrees to "prove in" the new system before the existing system is retired. Specifically, PCNS-NY constructs the replacement system or network expansion parallel to the existing system and then "turns it over" only when operational tests demonstrate that the new system is reliable. In this way, PCNS-NY ensures that the newly engineered system meets the design specifications with virtually no degradation of service and no disruption in service.

(4) Network Reliability

The reliability of a communications network is critical to both common carriers and private network operators. Over the past 10 years, LOCATE has engineered digital microwave networks that offer state-of-the-art reliability. Furthermore, LOCATE currently operates a digital microwave network in the New York City metropolitan area with paths in the 2, 4, 6, 11, 18 and 23 GHz band. This network provides state-of-the-art, reliable service to major brokerage firms and financial institutions that demand reliability and cannot tolerate a disruption in service. In its negotiations with existing users PCNS-NY is committed to providing these users with replacement networks that offer equivalent reliability.^{19/} Moreover, PCNS-NY believes that the existing user should be able to elect to continue to operate either a private network or to migrate to LOCATE's common carrier facilities.

B. Existing Users Are Receptive to Relocation Through Market-Based Negotiations

On an individual basis, existing users are receptive to relocating their 2 GHz microwave facilities to higher frequencies or alternative media based on PCNS-NY's relocation proposals. Through negotiations with PCNS-NY, existing users realize that they can obtain substantial enhancements to their communications network through negotiated reallocation. Specifically, existing

^{19/} For a discussion of the reliability of the 4 and 6 GHz band see Section III infra and Exhibit F.

users can benefit by: (1) the installation of new, upgraded communications facilities at no cost; (2) redesigned network configurations that offer improved reliability; (3) the early use of PCS; and (4) the potential lease of their rights-of-way. In times of financial restraint, communications managers have a unique opportunity to make network improvements without any additional capital outlay.

The value of this opportunity has been recognized by existing users in their negotiations with PCNS-NY. PCNS-NY has been successful in its negotiations with public safety organizations such as the Suffolk County Police Department and local government entities such as the City of San Diego, gas and electrical utilities such as Long Island Lighting Company ("LILCO") and San Diego Gas and Electric Company (SDG&E), and with other agencies such as the Port Authority of New York and New Jersey.^{20/} All of these users have expressed their willingness to migrate to higher frequencies based on PCNS-NY's proposal as demonstrated by letters submitted to the FCC.

The Suffolk County Police Department advised Chairman Sikes that it would be willing to relocate its microwave facilities to appropriate higher frequencies. Prior to submission of its proposal to the Suffolk County Police Department, LOCATE performed frequency searches and then cleared frequencies for the police department's replacement systems. Furthermore, the

^{20/} See Exhibits A, B, C, D and Letter from the Port Authority of New York and New Jersey attached as Exhibit E.

Suffolk County Police Department expressed its support for the Commission's proposal to encourage market based negotiations of this type as a means of reallocating spectrum in the 1850-1990 MHz band to emerging technologies. See Letter from Suffolk County Police Department attached as Exhibit A.

LILCO recognizes the potential contribution of their facilities to PCS. LILCO is presently in discussions with LOCATE and PCNS-NY regarding the deployment of PCS throughout Long Island as "both a user of PCS and as a partner in a potential joint venture." LILCO has advised the FCC that it is not opposed to relocating its current 2 GHz facilities to a higher operating frequency through marketplace negotiations with PCNS-NY. See Letter from LILCO attached as Exhibit B.

The receptivity of existing users to relocation is not unique to New York. PCNS-NY recently expanded its relocation efforts to areas beyond the New York City metropolitan area and specifically to key cities in California. PCNS-NY's efforts in southern California demonstrate that market-based negotiations offer a nationwide solution to allocating spectrum to emerging technologies. In response to discussions with PCNS-NY, SDG&E, an investor-owned utility serving San Diego County that employs 2 GHz microwave equipment for voice and data communications, advised the FCC that it supports the Commission's initiatives regarding the development of emerging communications technologies including PCS. In a letter submitted to the FCC, SDG&E stated that it is not opposed to relocating its current 2 GHz facilities